

REMARKS

Applicant has carefully reviewed and considered the Final Office Action of April 17, 2008, including the cited prior art. In response thereto, Applicant has amended Claim 1 and makes the following remarks.

Applicant has amended Claim 1 to more particularly define Applicant's invention relative the return segment.

The drawings stand objected to under 37 CFR 1.83(a) as the Office Action alleges that they do not show every feature of the invention specified in the claims. In particular, "the return branch of the inductor half-shell having only one inductor segment is displaced rearwardly relative to the surface of the component to be hardened".

Applicant respectfully traverses this objection. Not only is this feature found in the Description (page 7, paragraph 2), but is, in fact, shown in Figure 1 as filed. In particular, and as the color annotated drawing of Exhibit A (attached hereto) illustrates, Figure 1 clearly shows that as the two inductor segments (7 and 8) of the inductor half-shell (5) are placed near the surface of the component (2) to be hardened, *the return segment (9) of inductor half-shell (4) is at a rearward distance from the component (2) to be hardened*. Accordingly, Applicant respectfully requests reconsideration and removal of this objection.

Claims 1, 2, 4-8, 10 and 15-18 stand rejected under 35 USC 102(b) as being anticipated by Laughlin et al. (USP 3,784,780).

Laughlin discloses an apparatus and method of heating wear surfaces on a camshaft wherein at least two fixed inductors surrounding the camshaft simultaneously heat two or more axially spaced surfaces. The workpiece being moved successively through the inductors until all of the wear surfaces have been inductively heated for quench hardening. Although the Office Actions states that the noted claims are *clearly anticipated* by Laughlin, Applicant respectfully

submits that the Office Action merely concludes anticipation without providing proof of Laughlin disclosing any elements of any claims. Accordingly, and particularly in light of the previously amended claims, Applicant requests reconsideration and removal of this rejection.

Claim 9 stands rejected under 35 USC 103(a) as being unpatentable over Laughlin in view of Ottenwaelder (USP 6,160,248). Ottenwaelder discloses a device for electro-inductive hardening of bearing surfaces and transition radii in crankshafts. Most notably, and in contrast to the previously amended present invention, it can be seen in Figure 5 that the inductor has two inductor segments, one of which is in the input branch and the other is the return branch.

By contrast to both Laughlin individually as well as any *potential* Laughlin and Ottenwaelder combination, and together with the previously amended claims, applicant has amended claim 1 to include the feature that a return segment of the inductor half-shell has only one inductor segment that is displaced rearwardly relative to the surface of the component to be hardened. As such, the two inductor segments of inductor half-shell are placed near the surface of the component to be hardened, whereas the return segment of the inductor half-shell has a distance from the component to be hardened. With this displacement of the return segment it is possible to use only one inductor segment through which current flows leading to a more homogeneous hardening zone and the possibility to better exploit prescribed tolerances.

CONCLUSION

Applicant respectfully submits that in light of the arguments set forth in this response, this application is now in condition for allowance, and requests that a timely Notice of Allowance be issued. However, should Examiner be of the opinion that further amendments or response is required, Applicant encourages Examiner to contact the undersigned attorney at the telephone number set forth below.

Respectfully submitted,

COOK, ALEX, McFARRON, MANZO,
CUMMINGS & MEHLER, LTD.

By: 

David Mundt, Reg. No. 41,207
200 West Adams Street
Suite 2850
Chicago, Illinois 60606
(312) 984-0144 (Telephone)
(312) 984-0146 (Facsimile)